# SRS-Z1000/Z1000PC

# **SERVICE MANUAL**

Ver 1.2 1999.05 With SUPPLEMENT (9-923-352-81)





US Model Canadian Model SRS-Z1000 AEP Model UK Model E Model SRS-Z1000/Z1000PC

#### **SPECIFICATIONS**

#### **Amplifier section**

Power output 7.5 W + 7.5 W

Input impedance 4.7 kilohms (at 1 kHz) Input Stereo mini jack × 2 (INPUT 1, 2)

#### **Speaker section**

System Speaker unit Full-range, bass reflex type Magnetically shielded ø65 mm

 $(2.5/_8 \text{ inch})$ 

Nominal Impedance  $8~\mathrm{ohms}$ Rated input power 7.5 W

#### General

Power requirement DC IN 15 V jack accepts the supplied Sony AC power adaptor

(left speaker only) Approx.  $95 \times 175 \times 160 \text{ mm } (3^{3}/_{4} \times 7 \times 6^{3}/_{8} \text{ in.}) \text{ (w/h/d) incl.}$ Dimensions

projecting parts and controls

Approx. 1.6 kg ea.

Supplied accessories AC power adaptor (1)

Connecting cord (stereo miniplug ←→ stereo miniplug) (1)

Optional accessories Plug adaptor PC-236HG

Connecting cord RK-G138HG

Design and specifications are subject to change without

The CE mark on the unit is valid only for products

marketed in the European Union

**ACTIVE SPEAKER SYSTEM** 





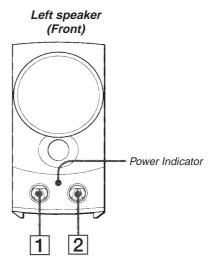
## SECTION 1 GENERAL

This section is extracted from instruction manual.

The Sony SRS-Z1000/Z1000PC is a compact-size speaker system with a built-in power amplifier. This system can be connected to a Discman, WALKMAN\* headphone stereo, MD station, etc.

- Newly developed Σ-type magnetic circuit reproduces powerful bass that you cannot imagine from its appearance.
- High-grade aluminum enclosure.

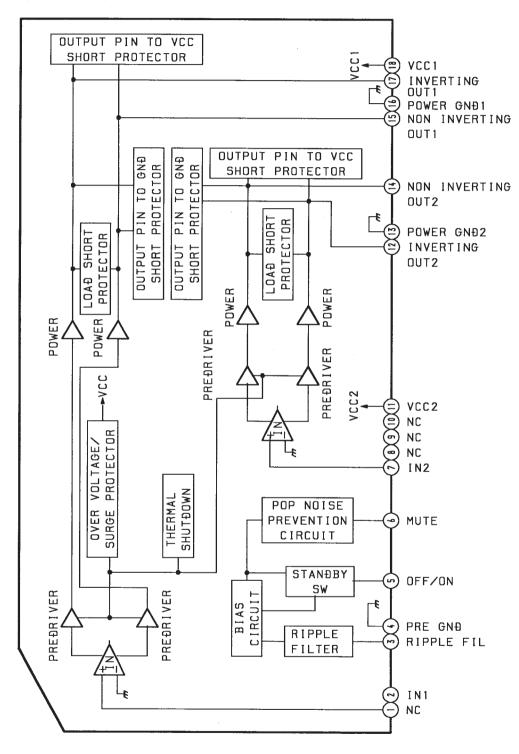
- Power output of 7.5 W + 7.5 W
- MEGA BASS and IBB (Intelligent Bass Boost) circuit enables you to obtain powerful bass regardless of the sound volume.
- \* WALKMAN is a registered trademark of Sony Corporation.



- 1 Turn the POWER switch to turn on the system.
  - The POWER indicator lights up.
- 2 Adjust the volume with the VOLUME control.

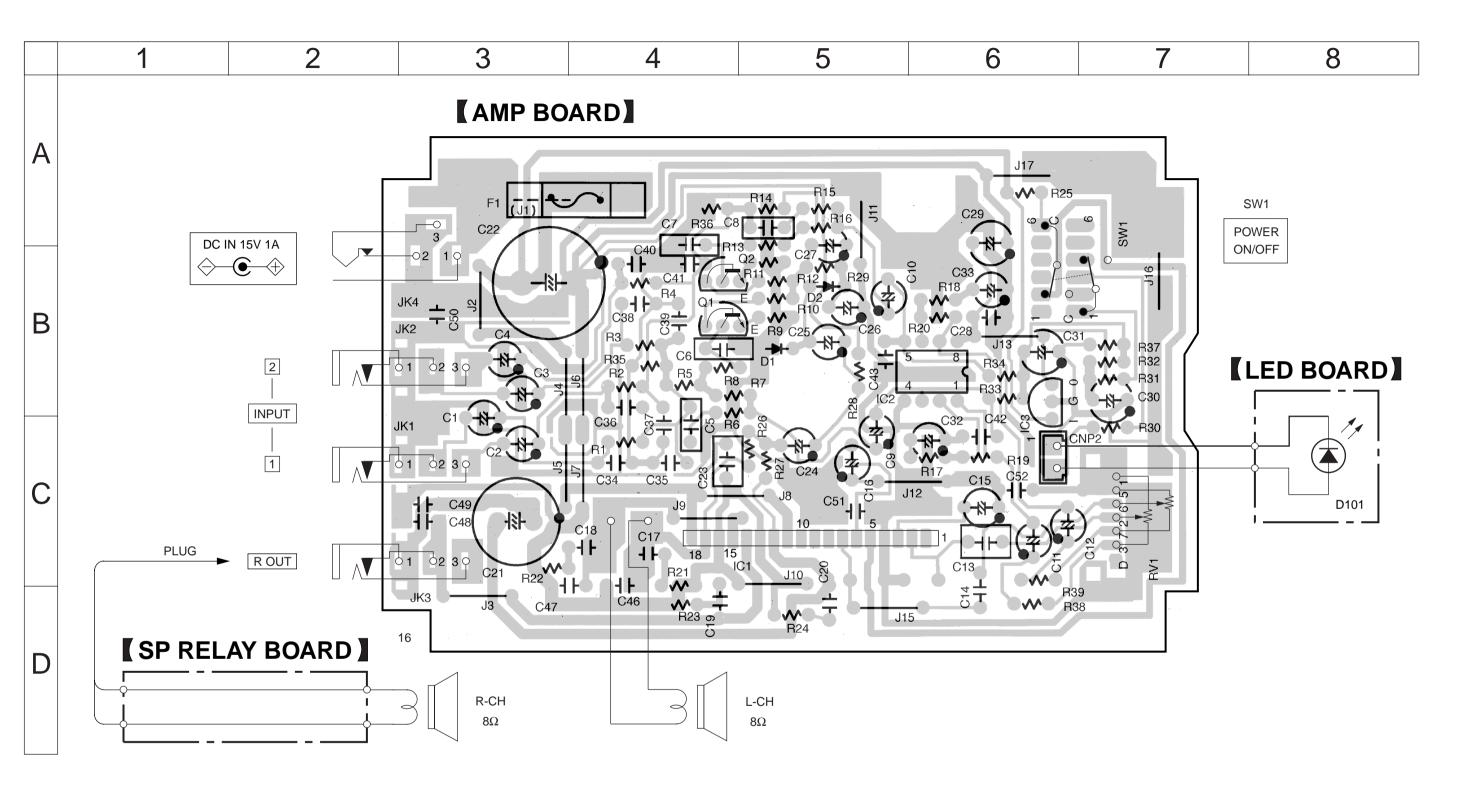
#### 2-1. IC BLOCK DIAGRAM

IC 1 LA4705NA



#### SRS-Z1000/Z1000PC

#### 2-2. PRINTED WIRING BOARD

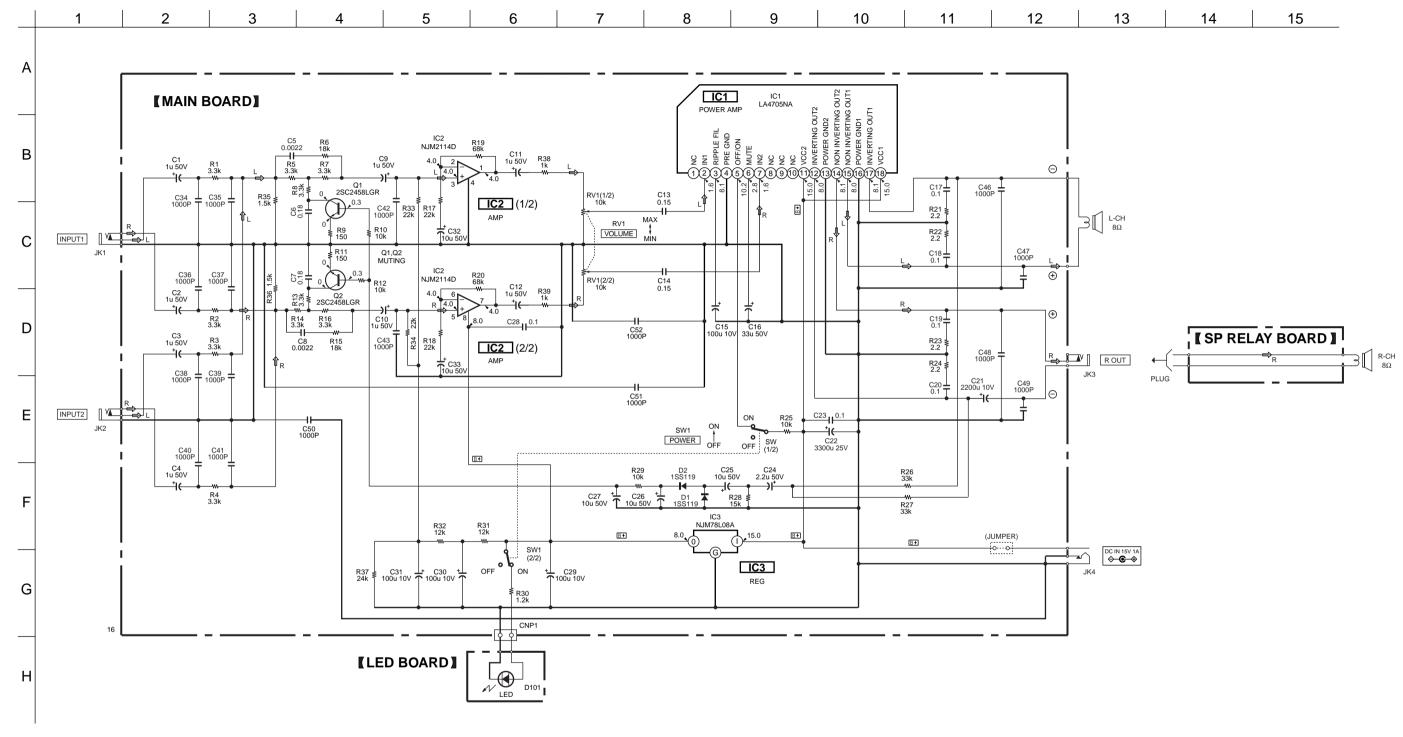


### Semiconductor

Locatio	Location									
Ref. No.	Location									
D1	B-5									
D2	B-5									
D101	C-8									
IC1	C-5									
IC2	B-6									
IC3	B-6									
Q1	B-4									
Q2	B-4									

#### Note on Printed Wiring Board:

- : parts extracted from the component side.
   : Pattern from the side which enables seeing.



#### Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $^{1}/_{4}$  W or less unless otherwise specified.

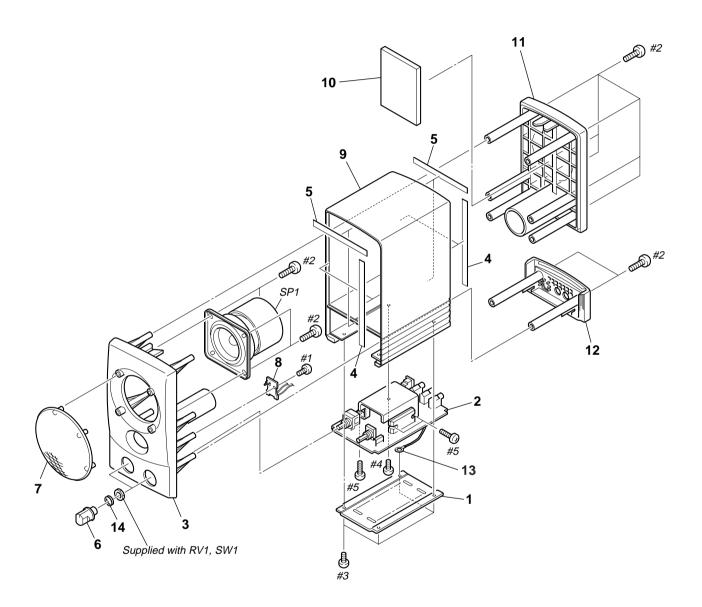
- : panel designation.
  B+ : B+ Line.
  Power voltage is dc 1.5 V and fed with regulated dc power supply from external power voltage jack.
- Voltages are taken with a VOM (Input impedance 10  $M\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- • : parts extracted from the component side.
- : Pattern from the side which enables seeing.

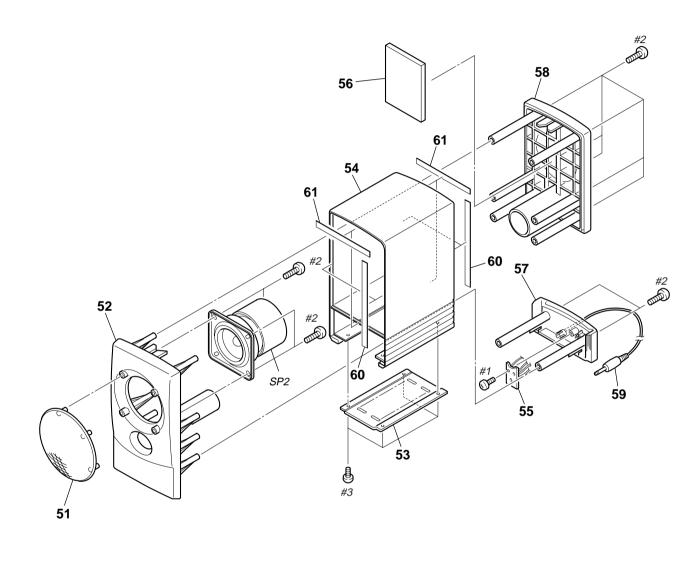
### 3-1. CABINET (R) SECTION

# SECTION 3 EXPLODED VIEWS

#### NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- 3-1. CABINET (L) SECTION
- The mechanical parts with no reference number in the exploded views are not supplied.
   Hardware (# mark) list and accessories and
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.





Ref. No.	Part No.	<u>Description</u>	<u>Remarks</u>	Ref. No.	Part No.	<u>Description</u>	<u>Remarks</u>	Ref. No.	Part No.	<u>Description</u>	<u>Remarks</u>	Ref. No.	Part No.	<u>Description</u>	<u>Remarks</u>
* 1	4-997-076-01	COVER, UNDER		* 8	1-668-102-11	LED BOARD		51	X-4949-421-1	GRILLE ASSY (Z1000)		57	4-997-082-01	PANEL (R), JACK (Z1000)	
* 2	A-4542-484-A	AMPLIFIER BOARD, COMPLETE		9	4-997-072-01	CABINET		51	X-4949-524-1	GRILLE ASSY (Z1000PC)		57	4-997-082-11	PANEL (R), JACK (Z1000PC)	
3	4-997-073-01	PANEL (L), FRONT (Z1000)		* 10	4-997-278-01	ABSORBENT, ACOUSTIC		52	4-997-081-01	PANEL (R), FRONT (Z1000)		58	4-997-074-01	PANEL, REAR (Z1000)	
3	4-997-073-11	PANEL (L), FRONT (Z1000PC)		11	4-997-074-01	PANEL, REAR (Z1000)		52	4-997-081-11	PANEL (R), FRONT (Z1000PC)		58	4-997-074-11	PANEL, REAR (Z1000PC)	
4	4-997-083-01	PACKING (LARGE)		11	4-997-074-11	PANEL, REAR (Z1000PC)		* 53	4-997-076-01	COVER, UNDER		59	1-775-692-11	CORD (WITH PLUG) (R) (Z1000)	
5	4-997-084-01	PACKING (SMALL)		12	4-997-075-01	PANEL (L), JACK (Z1000)		54	4-997-072-01	CABINET		59	1-775-692-21	CORD (WITH PLUG) (R) (Z1000PC)	
6	4-997-077-01	KNOB (Z1000)		12	4-997-075-11	PANEL (L), JACK (Z1000PC)		* 55	1-668-103-11	RELAY BOARD		60	4-997-083-01	PACKING (LARGE)	
6	4-997-077-11	KNOB (Z1000PC)		13	7-623-508-01	LUG, 3		* 56	4-997-278-01	ABSORBENT, ACOUSTIC		61	4-997-084-01	PACKING (SMALL)	
7	X-4949-421-1	GRILLE ASSY (Z1000)		14	4-964-032-01	SPRING, COIL						SP2	1-505-803-11	SPEAKER(065F039)	
7	X-4949-524-1	GRILLE ASSY (Z1000PC)		SP1	1-505-803-11	SPEAKER(065F039)									

## SECTION 4 ELECTRICAL PARTS LIST

**AMPLIFIER** 

#### NOTE:

Abbreviation

When indicating parts by reference number, please include the board name.

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifié.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS: uF: uF

- RESISTORS
   All resistors are in ohms.
   METAL: metal-film resistor
   METAL OXIDE: Metal Oxide-film resistor
   F: nonflammable
- COILS uH: μH
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA..., uPA..., μPA...,
  uPB..., μPB..., uPC..., μPC...,

CND SP	: Canadian : Singapore		ul	F: μF				uPD, μPD	•	ŕ	
Ref. No.	Part No.	Description			Remarks	Ref. No.	Part No.	Description			<u>Remarks</u>
*	A-4542-484-A	AMPLIFIER BOAF	RD. COMPL	ETE		C41	1-162-294-31	CERAMIC	0.001uF	10%	50V
		*****				C42	1-162-294-31		0.001uF	10%	50V
						C43	1-162-294-31	CERAMIC	0.001uF	10%	50V
	7-685-647-79	SCREW +P 3X1	0 TYPE2 NO	N-SLIT		C46	1-162-294-31	CERAMIC	0.001uF	10%	50V
	7-685-873-09	SCREW +BVTT	3X10 (S)			C47	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< CAPACITOR >				C48	1-162-294-31		0.001uF	10%	50V
						C49	1-162-294-31		0.001uF	10%	50V
C1	1-124-903-11		1uF	20%	50V	C50	1-162-294-31		0.001uF	10%	50V
C2	1-124-903-11		1uF	20%	50V	C51	1-162-294-31		0.001uF	10%	50V
C3	1-124-903-11		1uF	20%	50V	C52	1-162-294-31	CERAMIC	0.001uF	10%	50V
C4	1-124-903-11		1uF	20%	50V			COMMECTOR			
C5	1-106-351-00	IVIYLAR	2200PF	5%	200V			< CONNECTOR :	>		
C6	1-136-168-00	FILM	0.18uF	5%	50V	* CNP1	1-569-973-11	PIN, CONNECTO	R (PC BOAR	D) 2P	
C7	1-136-168-00		0.18uF	5%	50V	0.11		, 002010	(. 0 20/	,	
C8	1-106-351-00		2200PF	5%	200V			< DIODE >			
C9	1-124-903-11	ELECT	1uF	20%	50V						
C10	1-124-903-11	ELECT	1uF	20%	50V	D1	8-719-911-19	DIODE 1SS119	)		
						D2	8-719-911-19	DIODE 1SS119	)		
C11	1-124-903-11	ELECT	1uF	20%	50V						
C12	1-124-903-11	ELECT	1uF	20%	50V			< IC >			
C13	1-136-167-00		0.15uF	5%	50V						
C14	1-136-167-00		0.15uF	5%	50V	IC1		IC LA4705NA			
C15	1-124-443-00	ELECT	100uF	20%	10V	IC2		IC NJM2114D			
01/	1 104 //2 11	EL EOT	22	200/	1///	IC3	8-759-708-08	IC NJM78L08A	1		
C16	1-104-663-11		33uF	20%	16V			IACK			
C17 C18	1-136-165-00 1-136-165-00		0.1uF 0.1uF	5% 5%	50V 50V			< JACK >			
C19	1-136-165-00		0.1uF	5%	50V 50V	JK1	1 566 922 21	JACK (INPUT1)			
C20	1-136-165-00		0.1uF	5%	50V	JK2		JACK (INPUT2)			
020	1 130 103 00	TILIVI	o. rui	370	30 V	JK3		JACK (R OUT)			
C21	1-126-927-11	ELECT	2200uF	20%	10V	JK4		JACK, DC (DC II	V 5V 1A)		
C22	1-126-944-11		3300uF	20%	25V			, , ,	,		
C23	1-136-165-00	FILM	0.1uF	5%	50V			< TRANSISTOR	>		
C24	1-126-961-11	ELECT	2.2uF	20%	50V						
C25	1-124-907-11	ELECT	10uF	20%	50V	Q1	8-729-205-83	TRANSISTOR 2	2SC2458L-G	R	
						Q2	8-729-205-83	TRANSISTOR 2	2SC2458L-G	R	
C26	1-124-907-11		10uF	20%	50V						
C27	1-124-907-11		10uF	20%	50V			< RESISTOR >			
C28	1-136-165-00		0.1uF	5%	50V	D4	4 0 4 7 0 4 0 4 4	CADDON	0.01/	F0/	4/04/
C29	1-124-443-00		100uF	20%	10V	R1	1-247-843-11		3.3K	5%	1/4W
C30	1-124-443-00	ELECT	100uF	20%	10V	R2	1-247-843-11 1-247-843-11	CARBON	3.3K	5%	1/4W
C21	1 124 442 00	ELECT	100uE	200/	101/	R3			3.3K	5%	1/4W
C31 C32	1-124-443-00 1-124-907-11		100uF 10uF	20% 20%	10V 50V	R4 R5	1-247-843-11 1-247-843-11		3.3K 3.3K	5% 5%	1/4W 1/4W
C32	1-124-907-11		10uF	20%	50V 50V	KO	1-247-043-11	CARBON	3.31	370	1/4 00
C34	1-162-294-31		0.001uF	10%	50V	R6	1-249-432-11	CARBON	18K	5%	1/4W
C35	1-162-294-31		0.001uF	10%	50V	R7	1-247-843-11		3.3K	5%	1/4W
						R8	1-247-843-11		3.3K	5%	1/4W
C36	1-162-294-31	CERAMIC	0.001uF	10%	50V	R9	1-249-407-11		150	5%	1/4W F
C37	1-162-294-31		0.001uF	10%	50V	R10	1-249-429-11		10K	5%	1/4W
C38	1-162-294-31	CERAMIC	0.001uF	10%	50V						
C39	1-162-294-31	CERAMIC	0.001uF	10%	50V						
C40	1-162-294-31	CERAMIC	0.001uF	10%	50V						

### AMPLIFIER LED

Ref. No.	Part No.	<u>Description</u>			<u>Remai</u>	<u>rks</u>	Ref. No.	Part No.	<u>Description</u> Remarks
R11	1-249-407-11	CARBON	150	5%	1/4W	F	*	1-668-102-11	LED BOARD
R12	1-249-429-11		10K	5%	1/4W				*****
R13	1-247-843-11		3.3K	5%	1/4W				
R14	1-247-843-11		3.3K	5%	1/4W				< DIODE >
R15	1-249-432-11		18K	5%	1/4W				
							D101	8-719-822-26	DIODE TLG226
R16	1-247-843-11	CARBON	3.3K	5%	1/4W		******	******	***********
R17	1-247-863-91	CARBON	22K	5%	1/4W				
R18	1-247-863-91	CARBON	22K	5%	1/4W				MISCELLANEOUS
R19	1-249-439-11	CARBON	68K	5%	1/4W				********
R20	1-249-439-11	CARBON	68K	5%	1/4W				
							59	1-775-692-11	CORD (WITH PLUG) (R) (Z1000)
R21	1-249-385-11	CARBON	2.2	5%	1/6W	F	59	1-775-692-21	CORD (WITH PLUG) (R) (Z1000PC)
R22	1-249-385-11	CARBON	2.2	5%	1/6W	F	SP1	1-505-803-11	SPEAKER(065F039)
R23	1-249-385-11	CARBON	2.2	5%	1/6W	F	SP2	1-505-803-11	( )
R24	1-249-385-11	CARBON	2.2	5%	1/6W	F	******	******	**************
R25	1-249-429-11	CARBON	10K	5%	1/4W				
									ACCESSORIES & PACKING MATERIALS
R26	1-249-435-11	CARBON	33K	5%	1/4W				*********
R27	1-249-435-11	CARBON	33K	5%	1/4W				
R28	1-249-431-11		15K	5%	1/4W		<u> </u>	1-473-851-11	, , , , , , , , , , , , , , , , , , , ,
R29	1-249-429-11		10K	5%	1/4W		<u> </u>	1-473-852-11	ADAPTOR, AC (AC-S1510)(AEP,SP)
R30	1-249-418-11	CARBON	1.2K	5%	1/4W	F	<u> </u>	1-473-853-11	ADAPTOR, AC (AC-S1510)(UK)
								1-783-164-11	CORD, CONNECTION
R31	1-249-430-11		12K	5%	1/4W			3-861-605-21	MANUAL, INSTRUCTION(ENGLISH)(Z1000: US)
R32	1-249-430-11		12K	5%	1/4W				
R33	1-247-863-91		22K	5%	1/4W			3-861-605-31	MANUAL, INSTRUCTION
R34	1-247-863-91		22K	5%	1/4W				(ENGLISH/FRENCH/GERMAN/SPANISH)
R35	1-249-419-11	CARBON	1.5K	5%	1/4W	F		0.0/4 /05 44	(Z1000: CND,AEP,UK,E,SP,Z1000PC)
501			4 = 17	=0.		_		3-861-605-41	MANUAL, INSTRUCTION
R36	1-249-419-11		1.5K	5%	1/4W	ŀ		4 007 074 04	(GERMAN/DUTCH/SWEDISH/ITALIAN)(AEP)
R37	1-247-864-11		24K	5%	1/4W	_	ale ate ate ate ate ate ate at	4-997-071-01	FOOT, RUBBER
R38	1-249-417-11		1K	5%	1/4W		*******	· · · · · · · · · · · · · · · · · · ·	*********
R39	1-249-417-11	CARBON	1K	5%	1/4W	F			*******
		< VARIABLE RES	ICTOD.						
		< VARIABLE RES	1310K >						HARDWARE LIST ***********
RV1	1 225 504 11	RES, VAR, CARB	ON 10V/10I	/ (\/OLUN	ΛΕ)				
KV I	1-220-004-11	RES, VAR, CARD	ON TOK/TO	(VOLUIV	IL)		#1	7 405 122 10	SCREW +P 2.6X6 TYPE2 NON-SLIT
		< SWITCH >					#2	7-685-647-79	
		< JWIIGH?					#2		SCREW +PTT 2.6X4 (S)
SW1	1-771-302-11	SWITCH (POWE	5)				#3		SCREW +PTT 2.0X4 (S) SCREW +BVTT 3X6 (S)
		*******	,	******	*****	**	#5		SCREW +BVTT 3X10 (S)
					<i>"</i> 3	, 000 070-07	3000000		

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ∆ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

# SRS-Z1000/Z1000PC

SONY

**SERVICE MANUAL** 

1999.05

US Model Canadian Model SRS-Z1000 AEP Model UK Model

> E Model SRS-Z1000/Z1000PC

Australian Model

### **SUPPLEMENT-1**

File this supplement with the Service Manual.

Subject: SRS-Z1000PC: Australian model is added.

 SRS-Z1000PC: Difference of the Australian model from other models is AC adaptor only.
 Please refer to SRS-Z1000/Z1000PC service manual

(9-923-352-11) preriously issued for other information.

#### • PART LIST

Ref. No. Part No. Description

(Z1000PC: Australian)

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.

Replace only with part number specified.

Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifié.